

### Abstract

A method is proposed for the estimating of the residual service life of an apparatus which is subjected to a wear during operation, with the following steps:

- a) for at least one characteristic parameter (T) which is sensitive to the wear (V), a relationship is determined to a time parameter (A) which is representative for the operating period;
- b) a limit value (G) is fixed for the characteristic parameter (T) which gives the maximum permitted wear;
- c) a code field (KF) is established which gives a relationship between the characteristic parameter (T), the time parameter (A) and the wear (V);
- d) actual values are determined for the characteristic parameter (T) in dependence on the time parameter (A) with the aid of data obtained by a measurement;
- e) the instantaneously present wear (V) is determined from the actual values with reference in each case to the code field (KF);
- f) starting from the instantaneous actual value of the characteristic parameter (T), a determination is made by means of extrapolation to the limit value (G) of the end value of the time parameter (A) for which the maximum permitted wear is reached;
- g) the residual service life (RL) is estimated by a comparison of this end value with the value for the time parameter which belongs to the instantaneously present wear.

(Fig. 3)